

## WHAT IS CLAIMED IS:

1. An image processor comprising:

a first converter which extracts a line image region in input bit map image data and converts the line image to vector data;

5 a second converter which converts bit map data of pixels in the input bit map image data around the line image of the line image region based on the bit map data of pixels around the line image region; and

10 a composer which composes the vector data of the line image obtained by said first converter and the bit map data converted by said second converter.

15 2. The image processor according to claim 1, further comprising a character recognizer which recognizes characters in the input bit map data and converts the recognized characters to character codes, wherein said composer composes character data based on the character codes with the vector data and the bit map data.

3. The image processor according to claim 1, wherein said second converter selects pixel data of a pixel according to a side wherein the pixel exists relative to the line image defined by the vector data.

20 4. The image processor according to claim 1, wherein the vector data obtained by said first converter and the bit map data converted by said second converter are stored separately in a storage device, and said composer composes the bit map data and the vector data stored in the storage device.

25 5. The image processor according to claim 1, wherein the pixels around the line image region are pixels far from the line image by a predetermined distance.

6. The image processor according to claim 5, wherein the distance is along a direction perpendicular to the line image.

7. The image processor according to claim 1, wherein said image processor further comprises an image reader device which reads a document and provides the input bit map data of the document to said first and second converters.

8. A method of image processing comprising the steps of:  
extracting a line image region in input bit map image data;  
converting the line image to vector data;  
converting bit map data of pixels in the input bit map image data around the line image of the line image region based on the bit map data of pixels around the line image region; and  
composing the vector data of the line image obtained and the obtained bit map data.

9. A storage medium, which can be read by a computer, the storage medium storing a program comprising the steps of:  
extracting a line image region in input bit map image data;  
converting the line image to vector data;  
converting bit map data of pixels in the input bit map image data around the line image of the line image region based on the bit map data of pixels around the line image region; and  
composing the vector data of the line image obtained and the obtained bit map data.